

What is claimed is:

1. A liquid crystal display device including thin film transistors and pixel electrodes formed on a substrate being characterized in that

each thin film transistor includes a silicon film, a gate electrode, and a source electrode which is electrically connected to the pixel electrode,

between the silicon film and the substrate and between the pixel electrode and the substrate, a silicon oxide film and a silicon nitride film which is formed between the silicon oxide film and the substrate are interposed, and

a film thickness of the silicon nitride film is larger than a film thickness of the silicon oxide film.

2. A liquid crystal display device according to claim 1, wherein the silicon nitride film satisfies a following formula assuming the film thickness as d (nm) and a refractive index when a wavelength is 555nm as n (m being an arbitrary integer).

$$d - 10 \leq 555 \times m / (2 \times n) \leq d + 10$$

3. A liquid crystal display device according to claim 1, wherein the silicon nitride film satisfies a following formula assuming the film thickness as d (nm) and a refractive index when a wavelength is 555nm as n (m being an arbitrary integer).

$$0.9d \leq 555 \times m / (2 \times n) \leq 1.1d$$

4. A liquid crystal display device according to claim 1,

wherein the film thickness of the silicon nitride film falls within a range of 130nm to 160nm.

5. A liquid crystal display device according to claim 1, wherein the film thickness of the silicon nitride film falls within a range of 126nm to 165nm.

6. A liquid crystal display device according to claim 1, wherein a gate insulation film is formed between the silicon layer and the gate electrode, and an interlayer film arranged close to the gate insulation film is interposed between the gate insulation film and the pixel electrode.

7. A liquid crystal display device according to claim 6, wherein the interlayer film includes a first interlayer insulation film and a second interlayer insulation film which is formed between the first interlayer insulation film and the pixel electrode.

8. A liquid crystal display device according to claim 7, wherein the gate insulation film and the first interlayer insulation film are made of a same material.

9. A liquid crystal display device according to claim 8, wherein the gate insulation film and the first interlayer insulation film are made of silicon oxide and a following formula is satisfied assuming a total film thickness of the silicon oxide film, the gate insulation film and the first interlayer insulation film as d (nm) and m as an arbitrary integer.

$$0.9d \leq 555 \times m / (2 \times 1.5) \leq 1.1d$$

10. A liquid crystal display device according to claim 6, wherein a following formula is satisfied assuming a total film thickness of the second interlayer insulation film and the pixel electrode as $d(\text{nm})$ and m as an arbitrary integer.

$$0.9d \leq 555 \times m / (2 \times 2) \leq 1.1d$$

11. A liquid crystal display device according to claim 1, wherein the pixel electrode includes a reflective electrode and a light-transmissive electrode, and a distance from the substrate to the reflective electrode and a distance from the substrate to the light-transmissive electrode differ from each other.

12. A liquid crystal display device according to claim 11, wherein an organic film is formed between the reflective electrode and the substrate.

13. A liquid crystal display device according to claim 1, wherein the pixel electrode is a light transmissive electrode and an organic film is formed between the light transmissive electrode and the substrate.

14. A liquid crystal display device according to claim 12, wherein a following formula is satisfied assuming a total film thickness of the organic film as $d(\text{nm})$ and m as an arbitrary integer.

$$0.9d \leq 555 \times m / (2 \times 1.6) \leq 1.1d$$

15. A liquid crystal display device according to claim 1, wherein light transmissive counter electrodes are formed on

a substrate which faces the substrate in an opposed manner.

16. A liquid crystal display device according to claim 13, wherein a backlight is formed outside the substrate and a reflector is formed on the backlight.

17. A liquid crystal display device according to claim 1, wherein the pixel electrode is formed on an organic film formed on the substrate and a common electrode is also formed on the organic film.

18. A liquid crystal display device according to claim 17, wherein a following formula is satisfied assuming a total film thickness of the organic film as d (nm) and m as an arbitrary integer.

$$0.9d \leq 555 \times m / (2 \times 1.6) \leq 1.1d$$

19. A liquid crystal display device according to claim 16, wherein a backlight is formed outside the substrate and a reflector is formed on the backlight.